Peer Review File

Article information: https://dx.doi.org/10.21037/tcr-23-747

Reviewer Comments

Reviewer A

This is a good manuscript with sound methodology and results. It could improve with changes to grammar and syntax. Here are a number of suggestions:

Comment 1: Line 16 of Background – "include homologous" should be rewritten as "including homologous".

Reply 1: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have rewritten the word "include" as "including" (Page 2, line 16).

Comment 2: Line 18 and 19 of Background – "There has been evidence that a functional imbalance or defects in DDR genes are related to tumor susceptibility" should be rewritten as "There is evidence that functional imbalances or defects in DDR genes are related to tumor susceptibility".

Reply 2: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have rewritten the phrase "There has been evidence that a functional imbalance or defects in DDR genes are related to tumor susceptibility" as "There is evidence that functional imbalances or defects in DDR genes are related to tumor susceptibility" (Page 2, line 18-19).

Comment 3: Line 21 of Background. Be careful with the wording of the phrase "incidence is obviously on the rise". The use of obviously does not mean the same to everybody and should be avoided.

Reply 3: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have deleted the phrase "incidence is obviously on the rise" (Page 2, line 21).

Comment 4: Line 27 of Background. The phrase "best opportunity for operation" should be reworded to "best opportunity for an operation".

Reply 4: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have reworded the phrase "best opportunity for operation" to "best opportunity for an operation" (Page 2, line 27).

Comment 5: In the Materials and Methods section page 3 line 6 reads "The flowchart of this work as the presentation in the supplementary material-1." This does not make sense. Please correct.

Reply 5: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have reworded the phrase "The flowchart of this work as the presentation in the supplementary material-1." to "The flowchart of this work is

presented in the supplementary material-1."(Page 3, line 6).

Comment 6: In Results page 5 line 21 the authors write "Obvious differences were found in OS..." Again avoid using the term obvious.

Reply 6: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have replaced "Obvious" with "Significant" (Page 5, line 21). Comment 7: In results page 6 line 21 the authors write "Good predictive efficacy was displayed in the ROC curve for our signature, especially for DFS (AUC=0.630 for 1 year, 0.659 23 for 2 years, and 0.693 for 5 years)". But what is good predictive efficacy? What cut-offs on the ROC are the authors using to denote good efficacy?

Reply 7: Thanks a million for your detailed review of our manuscript. Good predictive performance can be understood as high accuracy. AUC values > 0.6 was used to denote good efficacy.

Comment 8: In the Discussion line 32 the authors write "and it has the third highest incidence of digestive tract malignant tumors". This phrasing needs to be reworded.

Reply 8: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have reworded the phrase "and it has the third highest incidence of digestive tract malignant tumors" to "and it is the third highest incidence among digestive tract malignant tumors" (Page 7, line 32).

Comment 9: In the Discussion line page 10 line 2 the authors write "There is no doubt that this evidence will provide new insights". Again be careful about using such definitive language.

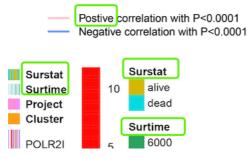
Reply 9: Thanks a million for your detailed review of our manuscript, we have modified our text as advised.

Changes in the text: We have reworded the phrase "There is no doubt that this evidence will provide new insights" to "These evidences may provide new insights" (Page 10, line 2).

Reviewer B

Figures and tables

(1) There are some spelling mistakes in Figure 1. Please revise.

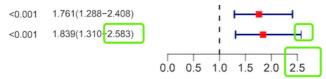


- (2) Please check if any description should be added to indicate what red and green dots represent in Figure 3B.
- (3) Please revise the below words to "p value" and "Hazard ratio (95% CI)" in

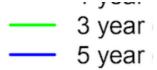
Figure 3C.



(4) It's suggested to add the scale bar 3.0 in the x-axis in Figure 3C, since the data exceeds the horizontal coordinate.



- (5) Please provide explanations for "*" "**" in Figure 3E.
- (6) Please add "s" after "year" in Figure 5B.

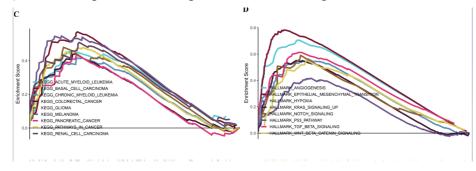


(7) There is a spelling mistake in Figure 5E-F.

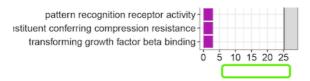
(8) Please revise the year to "1-year, 3-year, 5-year" in Figure 7 and Figure 11C.

```
1 year AUC=0.709)
3 year AUC=0.671)
5 year AUC=0.630)
```

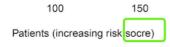
- (9) Figure 7C, F, I, L have the same issues with Figure 3C. Please revise.
- (10) Figures 8 and 10 have the same issues with Figure 7.
- (11) Figures should be cited **consecutively** in the text and numbered in the order in which they are discussed. Thus, the first citation of Figure 7B should be right after Figure 7A. Please check and revise.
 - **OR** you could cite the whole Figure 7 and Figure 8 at first, and then their subparts could be in any order.
- (12) Please complete the description of X-axis in Figures 9C-9D.



(13) Please add the description of X-axis in Figure 9B.



There is a spelling mistake in Figure 10B.



MSI€

- (14) There is no "*" in Figure 12B while you explain it in the legend, please check and revise.
- (15)Please provide explanations for "***" in Figure 14D legend.
- (16) It is suggested to add "year" after Age in Tables 1-3.
- (17)Please indicate the total number of high/low group in Table 1-3.

 Table 1 The chi-square test of the relation between different risk groups and clinical

features in TCGA cohort ← ⊞← High Risk Low Risk ← chi← Pvalue← ←

(18) Please add a table head for the first column of Tables 1-3.

Table 1 The chi-square test of the relation between different risk group features in TCGA cohort



Reply: Thanks a million for your detailed review of our manuscript, we have revised our figures and tables according to the above suggestions.